***CLASS COPY – DO NOT WRITE ON.***

CW 45: ALGEBRA Day 1

**Honors Geometry**

1. Given the equation
2. Solve for c.
3. Solve for a.
4. Given the equation
   1. Solve for c.
   2. Solve for a.
5. Given the equation: .
   1. Solve for a.
   2. Solve for b.
   3. Solve for c.
6. Solve for *f:*
7. The formula for converting Celsius to Fahrenheit is: , where C stands for degrees Celsius and F stands for Fahrenheit. Solve the equation for degrees Fahrenheit.
8. The perimeter P of a rectangle is given by the formula where L is the length and W is the width.
   1. Solve the formula for the width.
   2. Solve the formula for the length.
9. Solve for *m:* 12p = 6p + 7m²n
10. Given the equation 
    1. Solve for a:
    2. Solve for b:
    3. Solve for c:
11. Given the equation
    1. Solve for a:
    2. Solve for b:
    3. Solve for c:
12. Solve for q:
13. Solve:
14. Solve:
15. Solve:
16. Solve for *y*:
17. Solve for *y*:
18. Solve for *x*:
19. Solve for *x:*
20. Solve for *x:*
21. Solve for *x:*
22. A triangle has a height of 4 feet and an area of 32 feet2. What is the length of its base?
23. A public park is in the shape of a triangle. The side of the park that forms the base of the triangle is 200 yd long, and the area of the park is 7500 yd2. What is the length of the side of the park that forms the height of the triangle?
24. The interior (inside) angles of a polygon are the angles formed inside a polygon by two adjacent (next to) sides. The sum *S* of the measures of the interior angles of a polygon with *n* sides can be found using the formula . The sum of a polygon’s interior angle measures is 1260º. How many sides does the polygon have?
25. Pacific gray whales migrate annually from the waters near Alaska to the waters near Baja California, Mexico, and back. The whales travel a distance of about 5000 miles each way at an average rate of 91 miles per day.
    1. Write an equation that relates distance, rate, and time.
    2. Use your equation to calculate the number of days it take the whales to migrate one way.
26. Noah and Kate are shopping for new guitar strings in a music store. Noah buys 2 packs of string, and Kate buys 2 packs of strings and a music book. The book costs $16 and their total cost is $72.
    1. Write an equation that will help you solve for the price of a pack of strings.
    2. Use your equation to calculate the cost of one pack of strings.